



U.S. Department of Education Green Ribbon Schools

**2012-2013 Presentation of Nominee to the
U.S. Department of Education**

Douglas County School District - Colorado



2012-2013 Nominee Presentation Form

PART I - ELIGIBILITY CERTIFICATION

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.



verification.

ED-GRS (2012-2013)

Page 1 of 4

U.S. Department of Education Green Ribbon Schools 2013

For Public Schools only: ☐ Charter ☐ Title I ☐ Magnet ☐ Choice

Name of Sustainability Manager: Lee Smit

Official District Name: Douglas County School District

District Mailing Address: 620 Wilcox Street, Castle Rock, CO 80104

County: Douglas County

State District Code Number:* 0900

Telephone (303)242-6496 Fax (303)387-0455

Web site/URL: www.dcsdk12.org E-mail: lee.smit@dcsdk12.org, chanel.astler@dcsdk12.org

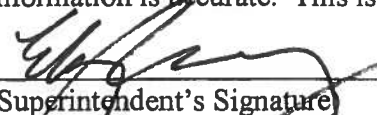
I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

 Date 1/24/13
(Sustainability Manager's Signature)

Name of Superintendent*: Dr. Elizabeth Celania-Fagen

District Name*: Douglas County School District Tel.: (303)387-0100

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. This is one of the highest performing green schools in my jurisdiction.

 Date 1-24-13
(Superintendent's Signature)

**Private Schools: If the information requested is not applicable, write N/A in the space.*

PART II – SUMMARY OF ACHIEVEMENTS

Instructions to School Principal

Provide a concise and coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your



PART II – SUMMARY OF ACHIEVEMENTS

Instructions to School Principal

Provide a concise and coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School.

PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

Instructions to Nominating Authority

The Nominating Authority must document schools' high achievement in each of the three ED-GRS Pillars and nine Elements. For each school nominated, please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency Colorado Department of Education

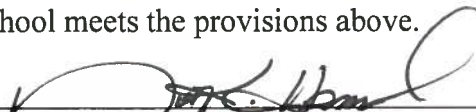
Name of Nominating Authority Commissioner Robert Hammond

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the



school meets the provisions above.


(Nominating Authority's Signature)

Date 1-25-13

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509
Expiration Date: February 28, 2015

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

Provide a 600-800 word description of your school's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Summarizing your strengths and accomplishments, provide a concise and coherent "snapshot" that describes how your school is representative of your state's highest achieving green school efforts. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School. Be sure to note if students were actively involved in preparing the application.

Douglas County School District is a large, rapidly growing district. Situated in over 900 square miles, 6,800,000+ square feet of building space, 60,000+ students and over 6,500 staff we are definitely challenged to make large scale changes across all of our schools. From 1990-2010 we were the fastest growing school district in the top 100 largest in the US – growing 399.7%! This led to many challenges throughout DCSD. In response to this rapid change, our District created a Strategic Plan to prepare our path to the future. The plan states, "As a district with strong traditions of innovation, excellence and economic efficiency, we are the ideal organization to design and implement a new system that responds to the convergence of recommendations for change in education."

As we develop a true World-Class school district, we built our Sustainability Program to support and enhance this conversion. Utilizing 21st century learning opportunities provides a solid platform on which to enact the changes needed to move our District properly into Sustainability. This shift begins with our students – the focus of our efforts.

DCSD's Sustainability development is based on student-led programs. Our efforts support the three "legs" of sustainability – social, environmental and economic. The students develop programs at their schools. They learn what the challenges and goals are, then build programs to achieve the goals they set in place. Students regularly study the impacts of their buildings, develop a marketing campaign to help teach everyone in their building what they need to do, then implement and lead those programs. In a real-world sense, they run the Sustainability Program for our District. These programs are entirely voluntary – schools only join if/when they want. We have grown from 11 students in one class, at one school – to over 3,000 students running the energy program across 60+ schools! In many schools, the students and staff decide what they want to improve, and build their program from there. The primary focus of many of their programs centers on behavior management – the students get to grade everyone in their building on how well they do – which, as you can imagine, the students truly enjoy!

The results these student teams have achieved is truly remarkable! As a District we saved over \$14,000,000 in six years. Our electrical use per square foot has dropped over 20%. These accomplishments are astounding when coupled with the fact that our District buildings are 100% air-conditioned, and our after-school community use amounts to over 60,000 hours per year! The students drive the programs and enjoy the feel of learning then leading a successful, positive change. What they learn at school also translates to home and work. This student-led initiative is one of the things we are most proud of here. Also, many other Districts from around the state and country are now learning from us and our students – and are beginning to implement this program in their schools.

Following the success of the Energy Management Program, our District has grown in many others sustainability areas. Recycling is a growing program, with 87 of 88 sites now participating. School gardens are also growing quickly throughout the District. When our Superintendent learned of the volume of paper our District has traditionally used, she came to our team to ask how we could reduce that impact dramatically. This was the genesis of our new paper use reduction incentive challenge. DCSD is now growing into many realms of sustainability – with students and staff helping choose the new challenges that are important to them and their individual communities.

Many of our District departments are also joining the charge to change. Nutrition Services have greatly improved our menu in terms of student health and wellness. We are an inaugural member of Michele Obama's Chef's Move to Schools. We are migrating many sites to durable trays and silverware, eliminating the need for much Styrofoam and plastic. Local foods are becoming a bigger part of our menu. Human Resources has tackled the paper challenge quickly and strongly, implementing a new online self-serve program. Our Information Technology team has also striven to reduce their impact. Server virtualization, remote service, energy management programs and techniques and more are part of their standard of business now. Transportation has optimized routes, reduced stops, improved vehicle efficiency and more. Operations and Maintenance have focused on running buildings as efficiently as possible while maintaining the best learning environments possible. Our Construction team has developed high-performing buildings and earned awards for their work.

In short, our District has grown the Sustainability Program through voluntary change. This process has been challenging and requires patience. However, the change is now embedded in our culture. You can see what we do, how we do it, and why. The students benefit from leading the programs – and they are building our future through this change.

Green Ribbon Schools

PART I: COVER PAGE *(Complete and attach as the first page of proposal)*

School Name:	Douglas County School District		
District Name <i>(if applicable)</i>:	Douglas County School District		
Mailing Address:	620 Wilcox Street Castle Rock, CO 80104		
School Website:	www.dcsdk12.org		
School Code*:	N/A	District Code*:	0900
Superintendent Name:	Elizabeth Fagen		
Telephone:	303-387-0123	E-mail:	Elizabeth.fagen@dcsdk12.org
Signature:			
Lead Applicant Name <i>(if different than principal)</i>:	Lee Smit / Chantel Astler		
	E-mail: lee.smit@dcsdk12.org chantel.astler@dcsdk12.org		
Telephone:	303-242-6496		
Signature**:			
School Type:	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Institute Charter School <input type="checkbox"/> Private		
Level Served:	<input checked="" type="checkbox"/> Elementary <i>(PK – Grade 5)</i> <input type="checkbox"/> K-8 <input checked="" type="checkbox"/> Middle <i>(Grades 6-8)</i> <input checked="" type="checkbox"/> High <i>(Grades 9 – 12)</i>		
Percentage of students eligible for Free and Reduced Lunch:	11%		
Is your school participating in a local, state or nationally recognized green school program (e.g., National Wildlife Federation Eco-Schools USA, Project Learning Tree's Green Schools, LEED or CO-CHPS)? <i>If yes, please explain below the program and level (if applicable) your school has achieved:</i>			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
DCSD's Sustainability Team is blending the 10 pathways of ECO-Schools USA and the 3 pillars of Green Ribbon Schools to develop a district sustainability plan. All schools and departments have been audited to establish a baseline of sustainable practices and to set goals for the future. Currently 8 schools are signed up with Eco-Schools USA, with the goal of having all schools working towards the highest level of achievement. Larkspur Elementary has studied Richard Louv's book <i>Last Child in the Woods</i> and is currently working to implement the Environment as an Integrating Context (EIC) as a framework to engage students in nature-rich learning experiences. The last six elementary schools built in DCSD were designed according to LEED standards and have won awards for their efficient design.			
Has your school, staff or student body received any green school, environmental, healthy school, environmental education or sustainability education awards? <i>If</i>			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

yes, please list below:

DCSD is home to:

- 2011 National Green Ribbon School, Flagstone Elementary**
- Four Blue Ribbon Schools, 19 schools selected as John Irwin Awardees, and 16 schools selected for the Governor's Distinguished Improvement Award.**
- HealthierUS School Challenge Award Winners from the Colorado Department of Education. One school Silver Level Winner, 4 schools Bronze level Winners.**
- DCSD has been recognized at the Silver Level for the Environmental Leadership Program and three schools have been recognized at the Bronze Level**
- Mountain Vista High School, Silver Award Recognition, ECO-Schools USA, 7 others signed up as Eco-Schools through National Wildlife Federation's Eco-Schools USA.**
- 2011 Seimens "We Can Change the World" Contest Finalists, 5th grade student team**
- 2009 Igniting Creative Energy Contest, student winner**
- Global Explorers Citizens of the World Youth Service Project Award Winner, High School winners**
- Inaugural Winner of PeaceJam Foundation Global Call to Action Award, High school winners**
- Two schools were featured in the "Advancing Environmental Literacy in Schools: Success Stories Across Colorado," published by the Alliance for Sustainable Colorado, Elementary and High School**
- Castle Rock Elementary featured in Colorado's Environmental Education Plan**
- Six schools selected as Healthy School Champions through Colorado Legacy Foundation**
- Four Middle Schools selected to participate in a market test through Western Dairy Council and Fuel Up to Play 60.**

**Private Schools: If the information requested is not applicable, write N/A in space provided.*

***By signing this application, Principal and/or Lead Applicant assure that the information provided is accurate to the extent possible.*

2013 Green Ribbon Schools Application Template

Directions: This template must be used to complete the application. Answer each question below by checkbox or typing in the information requested. Free responses are limited to the word limit noted following the question. **Note:** to activate the checkboxes below, double click on the box and select 'checked' when prompted. No written narrative is required outside of what is requested within this template.

Part II

Pillar 1: Reduced Environmental Impact and Costs

Buildings, grounds and operations goal: The school has made significant progress toward "net zero" environmental impact (zero carbon, solid waste, and hazardous waste footprints). See Attachment B Glossary of Terms for additional information.

Pillar 1 includes four main elements:

- Reduced or eliminated greenhouse gas emissions (including, but not limited to: construction, maintenance, cleaning and contaminants from mechanical systems), using an energy audit or emissions inventory and reduction plan, cost-effective energy efficiency improvements, conservation measures and/or on-site renewable energy and/or purchase of green power;
- Improved water quality, efficiency and conservation (including storm water and potable water);
- Reduced solid and hazardous waste production, through increased recycling, reduced consumption, and improved management, reduction or elimination of hazardous waste streams; and
- Expanded use of alternative transportation to, during and from school, through active promotion of existing locally-available, energy-efficient options and implementation of alternative transportation supportive projects and policies.

Each question in this section is designed to measure your school's progress towards Pillar I and its associated 4 elements.

A. Energy

<p>Can your school demonstrate a reduction in Greenhouse Gas emissions? <i>If yes, Percentage reduction: 18 % MT eCO₂/person</i> <i>Over (m/yy-m/yy): 6/06 - 6/12</i> <i>Initial GHG emissions rate (MT eCO₂/person): 1.17 MT eCO₂/person</i> <i>Final GHG emissions rate (MT eCO₂/person): .95 MT eCO₂/person</i> <i>Offsets: Energy Management Program, Energy Behavior Management Program, fuel reduction and Renewable Energy production (solar & wind installation)</i> <i>How did you calculate the reduction? EPA Green House Gas Equivalencies Calculator</i></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Has your school received EPA ENERGY STAR certification, or does it meet the requirements for ENERGY STAR certification? <i>If yes, in what year(s) was the certification earned? N/A</i> <i>Score(s) received: DCSD went from 0 schools being eligible for ENERGY STAR rating in 2006 to currently having 16 schools being eligible with scores ranging</i></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

from 76-94. Another 5 schools are within 4 points of ENERGY STAR eligibility.					
Has your school reduced its total non-transportation energy use from an initial baseline? If yes, answer the following:				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Percentage reduction:	16.4%	Current energy usage (kBtu/student/year): 8355 kBtu/student/yr Current energy usage (kBtu/sq. ft./year): 73.85 kBtu/sf/yr			
Time period measured:		From(m/yy): 06/2006		To(m/yy): 06/2012	
How did you document this reduction? We enter monthly bills for all sites into Utility Manager to do a direct comparison.					
What percentage of your school's energy consumption is derived from:					
On-site renewable energy generation: 32 Sites	9.2%	Type: Solar/Wind	Purchased renewable energy:	0%	Type:
Do you participate in USDA Fuel for School, DOE Wind for Schools or other federal or state school energy programs? If yes, please describe: DCSD has two schools participating in the Wind for Schools Program.			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
In what year was your school constructed?			1952-2010		
What is the total building area of your school?			6.8 million		
Has your school constructed a new building or renovated an existing building in the past ten years?			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
For <i>new</i> building(s)	Percentage building area that meets green building standards: Since 2006, the 6 buildings designed and built were specked off of LEED Gold Standards.		Certification and level: N/A	Total constructed area: 438,000	
For <i>renovated</i> building(s)	Percentage building area that meets green building standards: Although we build to these standards, we do not invest to certify the space so it's difficult to give an accurate percentage.		Certification and level: N/A	Total renovated area: N/A	
B. Water and Grounds					
What percentage of your landscaping is considered water-efficient and/or regionally appropriate?			90+%		
Describe types of plants used and location:		All sites use native plants and native grasses. Synthetic turf at all 9 high schools, 3 stadiums, and several elementary schools.			

Describe alternate water sources used for irrigation. (50 words max)

Collecting rain run-off is not allowed in our area, we use on-site rain gauges and centrally controlled "smart irrigation" systems to reduce consumption. Weather stations at each site give real-time data that allows us to irrigate based on evaporation/transpiration rates. We implemented policies to control leaks and audit water use.

Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces. (50 words max)

As a district, we work to limit the impermeable surfaces at each site by using as much of the native landscape as possible. (crushed refined, minimized asphalt, site design features) We monitor storm drains for quality control on a weekly and monthly basis documenting the checks we make.

Our school's drinking water comes from:

- ☐ Municipal water source
- ☐ Well on school property
- ☒ Other: 4 Wells and 12 Municipal water providers

Please describe how the water source is protected from potential contaminants. (Maximum 50 words)

Our municipal water districts implement stringent water quality standards for all of their customers, contaminant protection is provided through the local municipalities. DCSD tests the water quality monthly. Also, we have external companies test our water supplies regularly, and on request.

Please describe the program you have in place to control lead in drinking water. (Maximum 50 words)

The vast majority of our drinking water is provided through municipal jurisdictions. These jurisdictions must meet all state and federal codes and regulations regarding safe drinking water. For our non-municipal sites, we have an internal testing program verifying water safety for lead and other contaminants done on a weekly basis.

What percentage of the school grounds are devoted to ecologically beneficial uses? Please Describe. (Maximum 50 words)

75% Although it's difficult to calculate this percentage district-wide, DCSD strives to support schools to green up school grounds through Healthy Schools Initiative, Green Up Our Schools, and Communities Putting Prevention to Work(CPPW) grants. Efforts include:

- school gardens
- wetlands
- outdoor classrooms
- Douglas County Outdoor Education Center
- blue bird monitoring
- composting

C. Waste

What percentage of solid waste is diverted from landfilling or incinerating due to recycling and/or composting? Complete all calculations below to receive points.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected).

2493 cubic yards

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected).				678 cubic yards	
C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected).				0 %	
Recycling Rate = ((B + C) ÷ (A + B + C) x 100)				11.98%	
Monthly waste generated per person = A/number of students and staff.				11.9 pounds/person .037 cubic yards/person	
What percentage of your school's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine free? Although some specialty paper does not comply with these stringent guidelines, all standard paper supplied by our warehouse meets these criteria.				90 %	
List the types and amounts of hazardous waste generated at your school:					
Flammable Liquids 1,150 pounds	Corrosive Liquids 32 pounds	Toxics 156 pounds	Mercury: 8 pounds (elemental) 15,400 linear ft. fluorescent bulbs (universal waste)	Other: Biohazard 200 quarts of biohazard waste	
How is this calculated? Stericycle is our sole source provider who quantifies these amounts.					
How is hazardous waste disposal tracked? Our Environmental Manager tracks all hazardous waste removal and disposal with an online Google document.					
Which green cleaning custodial standard is used? For daily cleaning supplies, our warehouse only stocks 100% green products. The 80% accounts for the strippers and some other products that do not have green alternatives.					
What percentage, by volume, of all cleaning products in use are certified?				80 %	
What specific third party certified green cleaning product standard does the school use? A number of Diversey's chemical products are rigorously tested and certified by independent organizations such as Green Seal™, Environmental Choice, GreenGuard, EU Flower and Nordic Swan.				See Note	
Describe the other measure taken to reduce solid waste and eliminate hazardous waste. (Maximum 100 words) Solid waste reduction is supported from the top down in DCSD. In fact, after seeing baseline data, the superintendent requested an incentive driven paper reduction program. This program started this year. Other departments are following her lead. Nutrition services purchased durables for our elementary schools and is looking at compostables or foam densification for the others. Electronic communication has revolutionized how we do business. Human Resources has been a model of efficiency in paper reduction as they have centralized all personnel information in an online self-serve site. DCSD hosts an annual community e-cycle event and purchases					

some E-PEAT certified equipment.

D. Alternative transportation

What percentage of your students walk, bike, bus or carpool (2 + students in the car) to/from school? Note if you school does not use school buses. How is this data calculated? *(Maximum 50 words)*

DCSD has changed its approach to parent responsibility and efficiency in transportation. We have reduced the number of stops from 3,212 to 1,306. As a result, these numbers have been so variable that it has been difficult to collect this data. What we do know: 42% of all students typically ride buses.

Has your school implemented:

- ☒ Designated carpool parking stalls?
- ☒ Well-publicized no idling policy that applies to all vehicles (including school buses)?
- ☒ Vehicle loading/unloading areas that are at least 25 feet from building air intakes, doors and windows?
- ☒ Safe Pedestrian Routes to school, which are distributed to parents and posted in our office?

Describe activities in your safe routes program. *(Maximum 50 words)*

As part of Safe Routes to School, our transportation department has improved lighting, striping, and traffic flow. We have added paths and easy access trails to many of our schools. We utilize shuttle pick-up/drop off sites to reduce the impact in high traffic areas.

Describe how your school transportation use is efficient and has reduced its environmental impact.

(Maximum 50 words)

DCSD participated in the Air Quality Councils "Yellow Fleets for Blue Skies." We added particulate filters, diesel oxidation catalyst and re-gen systems for our bus fleet. We optimized routes, gone from 4 tier to 3 tier busing, and regionalized buses to increase efficiency reducing our fuel usage by 31%.

This is the end of Pillar 1. Please describe any other accomplishments or efforts your school has made towards reducing/eliminating environmental impacts focusing on innovative or unique practices and partnerships.

(Maximum 100 words)

DCSD values innovative approaches to support student learning. Our Sustainability program is student-led, providing leadership and development opportunities within our District Framework – primarily End Statement 1.0 "DCSD students acquire the knowledge, skills, and dispositions to be responsible citizens who contribute to society". Within the sustainability program, students develop their school's path – including partnerships such as Red Apple Recycling (textiles), Green Up Our Schools, and SURF (Summer Recycling Festival). These initiatives have led to over 600,000 pounds of electronics and 10,000+ pounds of textiles being recycled responsibly. We are also testing waterless urinals to see if they are a feasible option.

Part III

Pillar 2: Improve the Health and Wellness of Students and Staff

An integrated school environmental health program based on an operations and facility-wide environmental management system that considers student, visitor and staff health and safety in all practices related to design, construction, renovation, operations and maintenance of grounds; and high standards of nutrition, fitness, and quantity of quality outdoor time for both students and staff.

Each question in this section is designed to measure your school's progress toward Pillar 2.

A. Environmental Health

What is the volume of your annual pesticide use (gal/student/year)?

Describe efforts to reduce use.

As a district we do not use any pesticides, but instead use herbicides. The use of pesticides may be used if an outside contractor is required for pest mitigation ie. prairie dog control. Herbicides used last year: 300 gallons Round-up, 10 Gallons Trimec, 8 gallons Confront, 500 Pounds Snapshot...

**0.006
gal/student/year**

Which of the following practices does your school employ to minimize exposure to hazardous contaminants?

Provide specific example of actions taken for each checked practice. (Please check all that apply)

- ☒ Our school prohibits smoking on campus and in public buses. **District policy does not allow tobacco of any form on our premises nor in our vehicles, signage informs all visitors and staff of policy, and this is enforced across our District.**
- ☒ Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. **DCSD requires all science purchases to be authorized by our Environmental Manager, and elemental mercury is no longer allowed. Any existing equipment which may contain mercury, is being removed over time, as needed or found.**
- ☒ Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO). **Many of our kitchens have this type appliance. All of our kitchens have direct outdoor ventilation and carbon monoxide detectors. The outdoor ventilation is controlled on-site by staff.**
- ☐ Our school does not have any fuel burning combustion appliances.
- ☒ Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4pCi/L. **DCSD tests all occupied spaces for radon. If any test shows results above 4.0 pCi/L, mitigation and abatement takes place immediately.**
- ☒ Our school has identified any wood playground or other structures that contains chromate copper arsenate and has taken steps to eliminate exposure. **Our District has set a standard to eliminate all wood structures on our playgrounds. Any remaining wood structures are non-treated.**

Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. (100 words max)

All general use chemical access is restricted to a few staff members. Access to these chemicals is controlled through locked closets and storage containers. The chemicals we use are certified green cleaning chemicals that are safe to use in their respective environments. District standards verify what chemicals can be ordered and all supplies come through our warehouse.

Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (Maximum 100 words)

Healthy school environments are supported by:

- filtered ventilation**
- preventative maintenance**

- chemical control
- mammal restrictions
- staff training on asthma triggers
- support from health experts
- abatement and mitigation program

Healthy School Initiative has given schools the opportunity to build student's awareness and gives them strategies to live healthy. Many schools have integrated "The Great Body Shop" Curriculum which teaches students about healthy living, schools are promoting the District's Flat 14ers Program to encourage students to build lung health. Running clubs, pedometer challenges, brain break exercises, and S'cool Moves implementation are other ways schools are focusing on keeping kids healthy.

Describe actions your school takes to control moisture from leaks, condensation and excess humidity and promptly cleans up mold or removes moldy materials when it is found. *(Maximum 100 words)*

DCSD implements aggressive mitigation techniques to ensure healthy air quality for students and staff. As a district we are equipped to handle small to medium mold mediation efforts. When mold is identified, it is immediately removed and remediation is performed through the use of appropriate ventilation and humidity control and mold inhibiting materials. Air quality tests are then performed to ensure safe environments. For large-scale cases, outside companies are called to remediate.

Our school has installed local exhaust systems for major airborne contaminant sources. *(If yes, please describe):*
For known sources of airborne contaminants we do provide direct ventilation.
ie. Dust evacuation systems for wood shops.

☒ Yes ☐ No

Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. *(Maximum 100 words)*

DCSD has a rigorous preventative maintenance program and a highly trained in-house HVAC team that inspects and maintains all district equipment. We employ a semi-annual preventative maintenance schedule that follows a task list for each piece of equipment. Task lists include and document checking, cleaning, lubing, and filter changes.

Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes or national ventilation standards. *(Maximum 100 words)*
All buildings comply with local codes and meet ASHRAEs guidelines. When retro-commissioning is done on a building, ventilation is re-checked and re-calibrated as needed.

Describe other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. *(Maximum 100 words)*

Indoor Environmental Quality is handled by our district's Environmental Manager and Operations and Maintenance team. This team responds to any concern or complaint and tests the potentially impacted area. If any issue is discovered, we mitigate and abate the issue ourselves or if needed bring in a third party partner to rectify the problem.

B. Nutrition and Fitness

Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovation or unique practices and partnerships. (Maximum 100 words each)

- ☒ Our school participates in the USDA's Healthier School Challenge. **37 schools participating**
- ☒ Our school participates in a Farm to School program to use local, fresh food.
Nutrition Services believes in supporting local food sources. They feature a local crop once a month.
- ☒ Our school has an onsite food garden. **24 schools have onsite gardens.**
- ☒ Our school garden supplies food for students in the cafeteria, a cooking or garden class or to the community.
Garden programs differ from one site to another but feature cooking with food that is harvested, and fundraising by selling harvested items. We also participate in Michelle Obama's Chef's Move to School program.
- ☒ Our students spend at least 120 minutes per week (over the past year) in school supervised physical education.
This is a standard within our elementary schools, but we have had a hard time verifying numbers within our secondary schools.
- ☐ At least 50% of our students' annual physical education takes place outdoors. **This differs between our elementary and secondary schools.**
- ☐ Health measures are integrated into assessments. _____
- ☐ At least 50% of our students have participated in the EPA's Sunwise (or equivalent program). **10 schools take part in Sun Safety Programs through the Healthy School Initiative.**
- ☒ Our school uses a coordinated school health approach or similar initiative to address overall school health.
DCSD has a Wellness Oversight Committee, a published Wellness Policy, and a Healthy Classrooms Toolkit that helps direct initiatives at the school level.
- ☒ Our school partners with community organizations that promote health, wellness and fitness (i.e., 9Health Fair, Jump Rope 4 Heart, etc.). _____

<p>Food purchased by our school is certified as "environmentally preferable."</p> <p>Our District purchases more natural foods with less preservatives and additives.</p>	<p>Percentage:</p> <p>N/A</p>	<p>Type:</p> <p>N/A</p>
<p>Describe the type of outdoor education, exercise and recreation available. (Maximum 100 words)</p> <p>DCSD recently acquired an Outdoor Education facility, which we use to support outdoor education opportunities for our 5th and 6th grade students. We plan to extend these opportunities to more grade levels as we grow our program. It's our goal to preserve sporting opportunities for students even as budget has been reduced, as a result we have increased our participation numbers every year. We are proud that 50% of our high school students participate in sports. DCSD is dedicated to supporting recreation in our community. We achieve this by offering our facilities to youth and adult sports year round.</p>		
<p>Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. (Maximum 100 words)</p> <p>DCSD promotes wellness in students, staff and community members. DCSD participates in Michelle Obama's Chef's Move to Schools initiative. We implemented healthy changes to our menu including fresh fruit served daily, more</p>		

whole grain options, and worked with a local vendor to provide low sugar, fat free milk. We partnered with Tri-County Health and other agencies to provide the Flat 14ers Challenge. This is a district-wide initiative to increase physical activity by tracking steps and activities to virtually climb Colorado's 14,000' mountains. In partnership with Boulder Running Company and the Douglas County Educational Foundation, DCSD sponsors a community 5K.

Part IV
Pillar 3 : Effective Environmental and Sustainability Education

Student achievement goal: 100% of the school's graduates are environmentally and sustainability literate. Pillar III includes three main elements.

- 1) Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems.
- 2) Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy.
- 3) Development of civic engagement knowledge and skills, and students' application of these to address sustainability and environmental issues in their community.

Each question in this section is designed to measure your school's progress toward Pillar 3.

Which practices does your district employ to ensure environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships. (Please check all that apply)

- ☐ Our school has an environmental or sustainability literacy graduation requirement. *(Maximum 200 words)*_____
- ☒ Environmental and sustainability concepts are integrated throughout the curriculum. *(Maximum 200 words)* **As state standards change to include more environmental and sustainability concepts, teachers are integrating these concepts into their content. Currently, many of our high schools offer several science classes that weave these concepts into lessons and labs. Other disciplines also focus on these concepts as they relate to their particular subjects.**
- ☐ Environmental and sustainability concepts are integrated into assessments. *(Maximum 200 words)*_____
- ☐ Students evidence high levels of proficiency in the above assessments. *(maximum 100 words)*_____
- ☐ Professional development in environmental and sustainability education is provided to all teachers. *(Maximum 200 words)*_____

For Schools serving grades 9-12, provide:	Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: Out of the High Schools providing AP Environmental Science, 17% of seniors take it.	Percentage scoring a 3 or higher: 45%
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How does your district use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (Maximum 200 words)

DCSD recognizes the need for quality STEM instruction and shows its commitment to preparing students and staff for this task. Douglas County is host to a k-8 charter and STEM Charter High School focused on STEM initiatives. Our schools offer science electives including Biotechnical Engineering, Engineering, and AP Environmental Science. Our elementary science kits highlight the use of engineering as students learn about life, earth, and physical sciences. We hired a district level STEM Coordinator and offer STEM Staff Development courses at both the Elementary and Secondary levels.

Schools are using sustainability and the environment as a means to deliver STEM instruction. For example, after elementary students learned how wind energy works, they designed, constructed and tested wind turbine blades to see how design affects energy production. High school students use data from the solar equipment on their building to learn about renewable and nonrenewable sources. DCSD also hosts outside organizations like Ameribotics to offer enrichment opportunities for students. The first-ever team to represent the United States at the International Robot Olympiad in Jakarta, Indonesia was comprised of six DCSD students. The competition included a creative category in which students designed a robot to help save lives in an earthquake.

How does your district use sustainability and the environment as a context for learning green technologies and career pathways? (Maximum 200 words)

DCSD's Strategic Plan states, "our country and our business partners demand graduates who are globally aware, financially literate, creative, adaptable and resilient, collaborative, ethical, problem solvers, critical thinkers, and communicators to accommodate the careers in this new day." DCSD has built our district standards around developing these 21st century skills in students to prepare them for a job market we cannot predict.

To expose students to career pathways, DCSD hosted a Career Connect Expo for 4,800 Douglas County students. During this day-long career fair, eighth grade students from each of our middle schools were bused to Douglas County Fairgrounds where they met with 90 businesses and higher education representatives. Businesses from every industry were represented including: Agriculture, Natural Resources, Energy, and STEM industries. The purpose of the expo was to assist students with a better understanding of career opportunities, how their education can prepare them for future jobs and to engage the business community to "grow their own pipeline."

DCSD has been fortunate to have the opportunity to give our students first hand experience with green technologies. Thirty-two of our sites have solar panels or wind energy. These renewable sources offer teachers a means to teach students green technologies.

Describe students' civic/community engagement projects integrating environment and sustainability topics. (Maximum 200 words)

DCSD has developed civic/community engagement projects providing opportunities for students not only to learn about sustainable practices, but to also share what they have learned.

Organizations like Peace JAM and our own District Student Sustainability Team are mobilizing community efforts to support sustainability. The SUMmer Recycling Festival is one example of how a student team came alongside local businesses to provide an annual opportunity for community members to recycle electronics and textiles, shred documents, and gather supplies for a local task force.

The Student Sustainability Team is tasked with developing sustainable opportunities for other students in the district. This team has been given the opportunity to grant funds to student teams with innovative ideas for sustainable projects. They are also working to perform behavior audits on local businesses to help teach the sustainable practices they have learned.

A team of former DCSD students, passionate about sustainability, were hired this past summer to perform extensive audits on plug load, water use, and light levels in each of our 88 buildings. The team compiled and presented the data to the COO and District Sustainability Manager, noting trends and areas of improvement. This data has been crucial in informing next steps for improvement.

Describe students' meaningful outdoor learning experiences at every grade level. *(Maximum 200 words)*

DCSD supports teachers in providing meaningful outdoor learning experiences for their students.

- Our Communities Putting Prevention to Work grant provided 24 schools with funds to design and build outdoor gardens. These student maintained gardens allow teachers to support curriculum around plant growth cycles, composting, and healthy food education.

- Schools are using outdoor classroom areas for students to engage with nature as they read, write, and learn how to make scientific observations. Castle Rock Elementary has developed a wetland, an inquiry lab experience for their students to experience first hand how the environment supports wildlife throughout the year.

- DCOEC provides an outdoor lab experience that develops inquiry-based learning. Students see 4 different ecosystems, learn how to identify different species of trees, collect and identify macroinvertebrates, and take samples from the water supply that winds through Douglas county to determine if it is healthy.

- AP Environmental Sciences offer experiences for students to do work in Chatfield Reservoir as students study a local ecosystem and how the community implications are changing the ecosystem over time.

- Blue bird monitoring offers opportunities for students to track a specific species over time as they collect data on population and how other species may effect reproduction.

Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community and develop civic skills. *(Maximum 200 words)*

DCSD has had a rare opportunity to partner with Douglas County in the acquisition and repurposing of a property in southern Douglas County. The county purchased the former Emily Griffith Center in Larkspur and deeded it to the school district for the purpose of providing rich Outdoor Education opportunities for students. The Douglas County Outdoor Education Center (DCOEC) is unique in that it also trains high school leaders to come alongside the elementary students as mentors.

DCOEC has built a rigorous curriculum engaging students with the environment as they study the Atmosphere, Hydrosphere, Biosphere, Geosphere, and Sociosphere. DCOEC is also taking part in the Healthy School Initiatives by providing schools a healthy snack list and requiring each instructional block to be taught outside. Students are introduced to a variety of sustainable concepts and then select a sustainable project to take back to their schools. After students return to their schools, the District Sustainability Coordinator works with them to implement their projects. Projects range from textile recycling to zero-waste lunch room.

DCOEC has engaged the broader community in outdoor learning by working with scout troops, football teams, and

volunteers to build gardens, perform fire mitigation, and to create reusable serving dishes.

Describe your partnerships that help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. *(Maximum 200 words)*

DCSD focuses on professional development and in turn supports our staff working with other districts to create positive change. We work with many organizations in Colorado and across the country to promote sustainability and share our successes and learn from others.

In Colorado, we have a strong working relationship with Waste Management. We are working to develop a teacher resource kit around recycling. We are working with the sociology department at CSU doing case studies of our schools to learn how our behavior program has successfully changed culture in regards to sustainability. The results of these studies will be available to other districts to build their programs. The District Sustainability Team is working with Ponderosa High School to offer a State Student Sustainability Summit. We are participating members in many state and national organizations. We have presented at four Colorado Green School Summits, primarily around our behavior programs. After presenting our programs, they are now being implemented in at least a dozen other states.

We were invited to present and participate at the k-12 Leaders in Sustainability Summit (USGBC) and the National Green Schools Conference. The larger and stronger are networks are in sustainability, the greater change we can develop.

Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting innovative or unique practices and partnerships. *(Maximum 200 words)*

DCSD has developed a unique approach toward sustainability. We see our students and staff as partners as we increase efficiency and reduce our impact. The current economic challenges we face as a district have helped us focus on new and innovative opportunities to ensure we spend our money on students and staff.

Our energy management program came both out of necessity and opportunity. Like many other Districts around the country, we are facing substantial budget cuts. In hopes of limiting the effects to students, our district has turned to energy management as a viable means to save money by creating an incentive program where schools can earn a portion of what they save in energy usage. This year we have implemented an additional incentive program rewarding schools for reducing their paper use. Both programs require there be an adult leader as well as a student team to lead efforts. Not only have these programs spurred the creation of green teams across every participating school, they have ignited culture change among students and staff. These culture changes help integrate sustainable practices in our schools. Our students are impacting our community by taking what they learn home and to work.

Is your district participating in a local, state or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars?

☒ Yes ☐ No

Program(s) and level(s) achieved:

DCSD's Sustainability Team is blending the 11 pathways of ECO-Schools USA and the 3 pillars of Green Ribbon Schools to develop a district sustainability plan. All schools and departments have been audited to establish a baseline of sustainable practices and to set goals for the future. Currently 5 schools are signed up with Eco-Schools USA, with the goal of having all schools working towards the highest level of achievement. Our team has met with the Director of Eco-Schools USA and plans on using their "dashboard" district-wide to gather data and communicate what each school is accomplishing.

Has your school, staff or student body received any awards for facilities, health or environment?

☒ Yes ☐ No

Awards(s) and year(s):

- Six schools selected as Healthy School Champions through Colorado Legacy Foundation
- Four Middle Schools selected to participate in a market test through Western Dairy Council and Fuel Up to Play 60.
- The Elementary school prototype was selected in the 2008 edition of the School Planning & Management magazine to receive the distinguished Impact on Learning Award. The recognition noted the flexible design which can accommodate varying sites without compromising the unique attributes of the building. The design was also praised because of sustainable, high-performing aspects like sun shades, exterior insulation, reduced cooling loads, reduced HVAC equipment, ice storage, indirect evaporative cooling, displacement ventilation, lighting controls, and solar tubes and clerestory windows in concert with sloped ceilings to bring in natural light and minimize glare. The award noted that these aspects have been shown repeatedly to not only improve student performance, but to also enhance student and staff attitudes and reduce absenteeism, and that bright, inviting, vibrant spaces are spaces where students and staff want to be.
- ColoradoBiz magazine recently published the Colorado Sustainable Design Award winners. Awards were given in four categories; Residential, Commercial, Civic and Communities. Douglas County School District's new elementary school prototype received First Place in the Civic category.
- The Elementary school prototype was chosen as a Building of America project and was featured in the Real Estate & Construction Review - 2009 Colorado Edition. The Review provides readers an inside tour of the region's most important, innovative and unique new construction and renovation projects. The publication showcases all aspects of the project, from financing through design, and from needs assessment through completion. An important criteria is per square foot cost. DCSD consistently has one of the lowest per square foot costs for building schools in the region.
- The Council of Educational Facility Planners Rocky Mountain Chapter recently awarded the new Early Childhood Center the top honor of the Peak Design Merit Award. A panel of judges took into consideration many factors in making this award, including how well the building supports the learning environment, how the design team facilitated discussion and arrived at design solutions that met educational needs, the relationship between the physical environment and the students, teachers and community members, how the design connects learning to the community, how the design fosters community use and partnerships, and how the design elements fit within the context of the community. The new Early Childhood Center is located at 3950 Trail Boss Lane in Castle Rock.
- The High school prototype was chosen as a Building of America project and was featured in the Real Estate & Construction Review - 2008 Colorado Edition. The Review provides readers an inside tour of the region's most important, innovative and unique new construction and renovation projects. The publication showcases all aspects of the project, from financing through design, and from needs assessment through completion. An important criteria is per square foot cost. DCSD consistently has one of the lowest per square foot costs for building schools in the region.

Submit no more than 5 photos or up to 5 minutes of video content. Please describe what is submitted:

Thank you for the opportunity to showcase what our district is doing to reduce our impact and increase efficiency.

We have included a short video highlighting some points of pride for our district. You will see our student run behavior management program and our solar install.

We have also included an image of a tracking poster we created to align Eco-Schools USA pathways to sustainability and the three Pillars of Green Ribbon Schools. We have a tracking poster for each school and have them grouped by feeder area. These trackers have helped us compile what each school is accomplishing and communicate success.

CASTLE ROCK





Lyndsey Case / AP / 303-387-5000
Sustainability Champion / Position / Phone
Kelly Vrsetta / Bill Moore / 387-5000
Principal / Building Engineer / Main Phone

RECOGNITIONS:
• Has wildlife habitat (NWF certified)
• **ECO-SCHOOL**
• HSI Champion

PILLAR I

ENVIRONMENTAL IMPACT & ENERGY EFFICIENCY





- Habitat audits
- Student Energy Patrol
- **E MVP**

PILLAR II

HEALTHY SCHOOL ENVIRONMENTS





- Garden
- Trash Clean Up
- Outdoor Classroom
- presentations
- visiting experts
- HSI (09-10)
- outdoor classroom
- required outdoor time
- Active clubs
- Sun Safety
- Flat 14ers Program

PILLAR III

ENVIRONMENTAL & SUSTAINABILITY EDUCATION

- Curriculum-based studies
- inquiry instruction
- Wildlife habitat
- bird houses
- bat boxes
- Students: 500
- Staff: 20
- ENROLLMENT: 495
- TECH: 204

Finally, we have a chart that shows a comparison of different statistics over time. Student growth, square footage and utility rates have all grown significantly over the past several years. However, due to the efforts of students and staff across our District, our electrical usage per square foot has dropped dramatically.

DCSD Electric Usage vs District Growth

